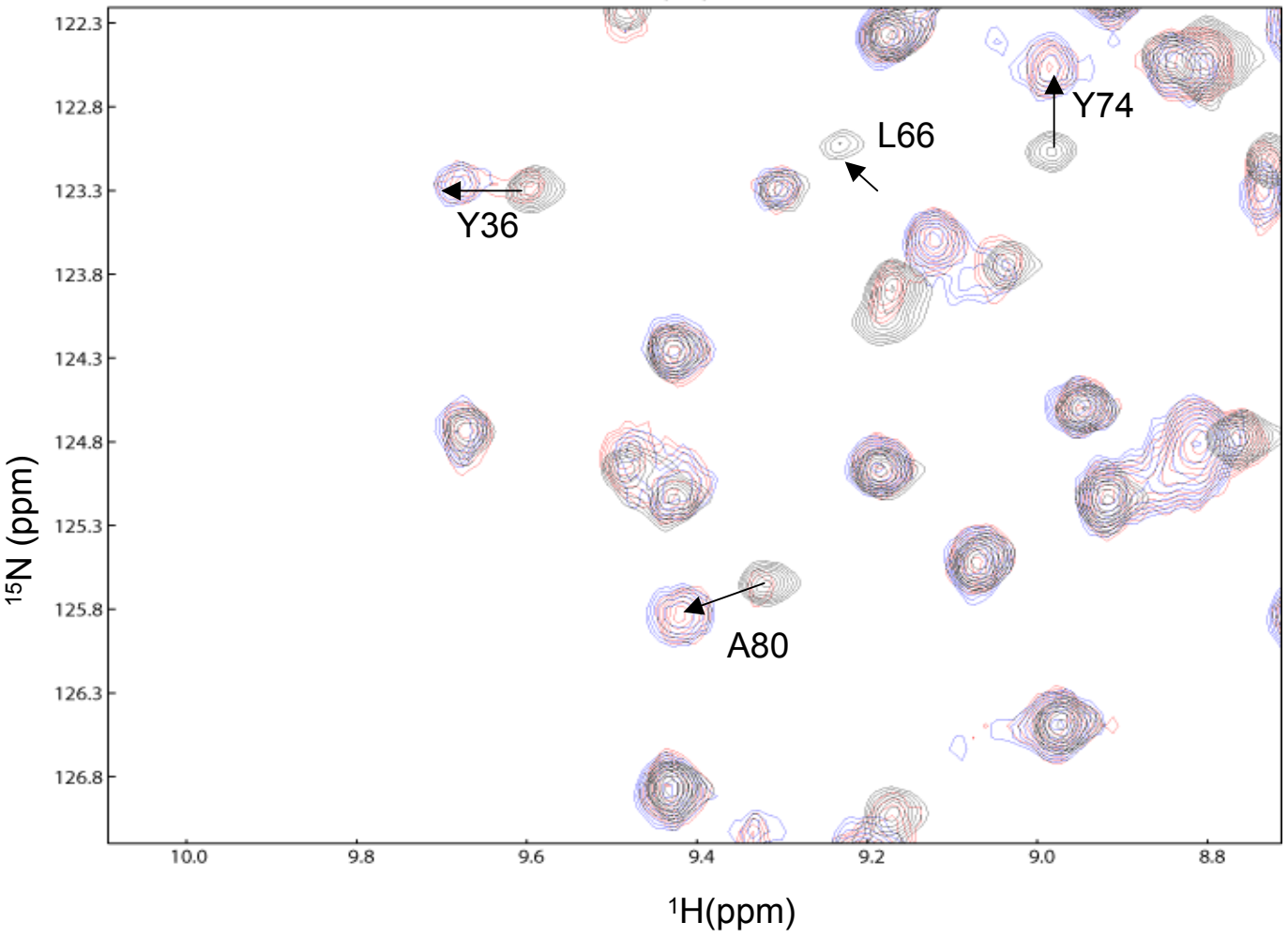
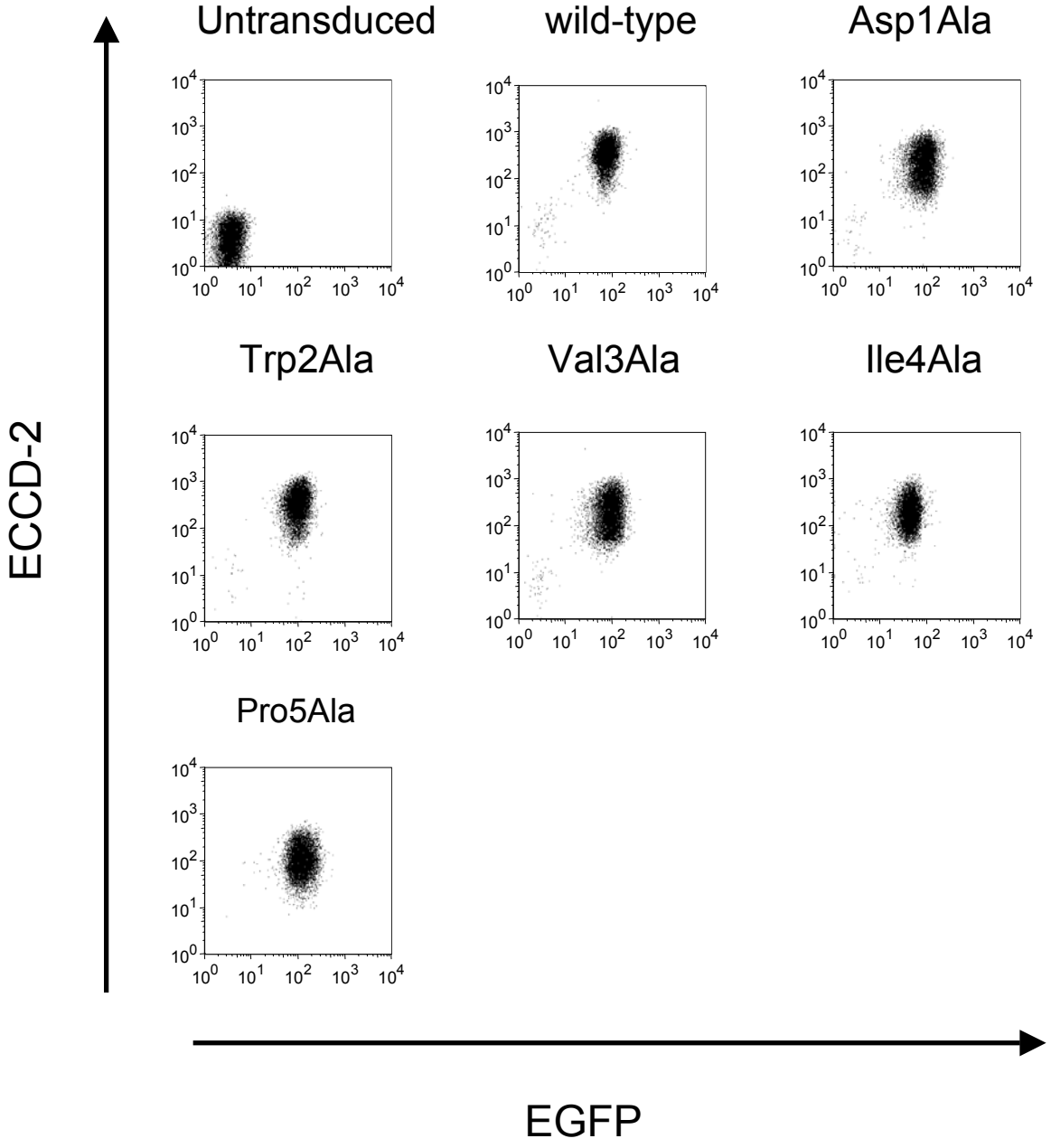


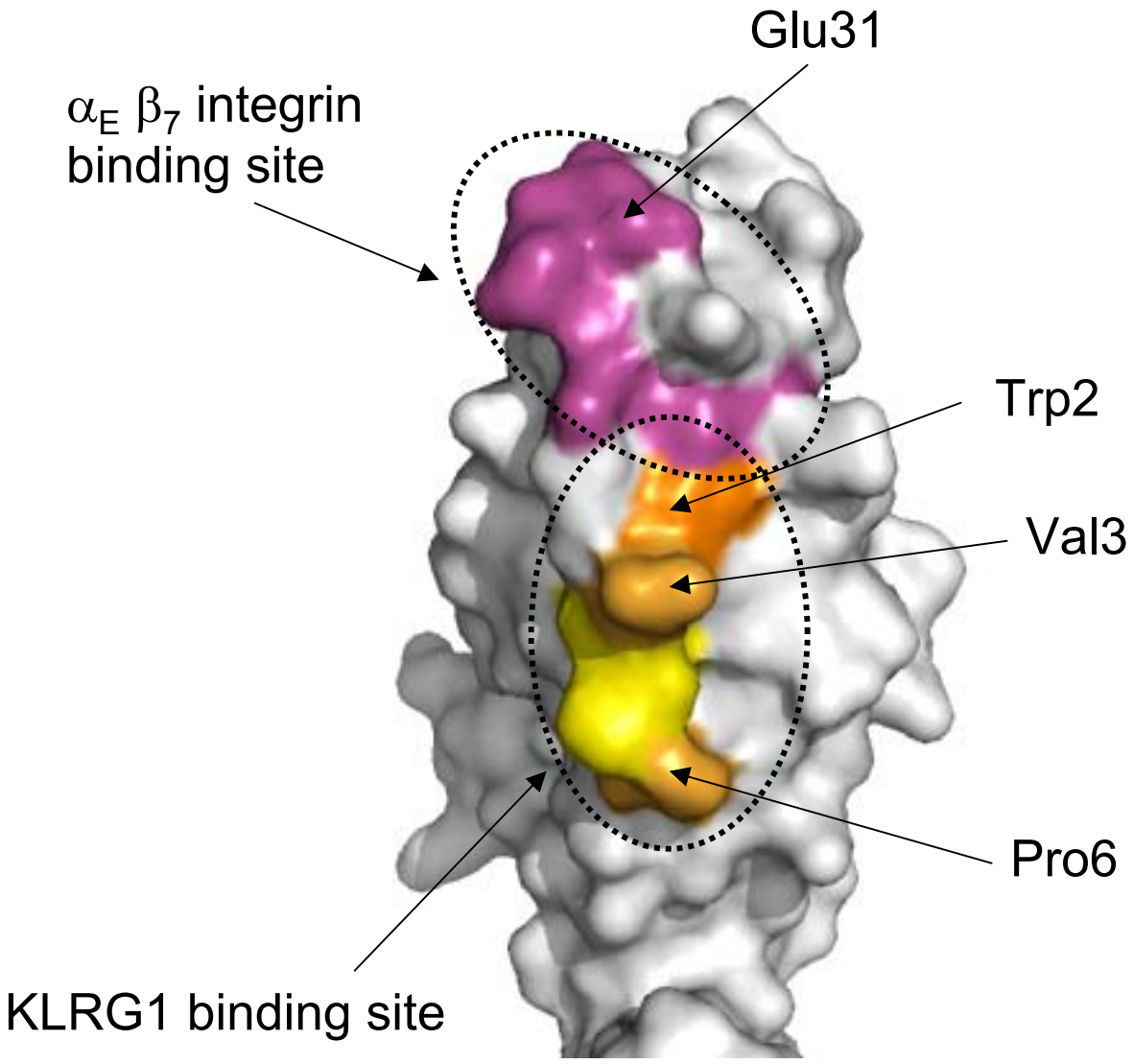
Supplemental Fig. S1. The ^{1}H-^{15}N HSQC spectra of ^{15}N-labeled EC-D1D2.

The spectra of free ^{15}N-labeled EC-D1D2 (grey), and ^{15}N-labeled EC-D1D2 mixed with KLRG1 at 70 μM (red) and 140 μM (blue). Black arrows show representative peak of chemical shift changed residues and disappeared residues.



Supplemental Fig. S2. Flow cytometry analysis of E-cadherin expression on BW5147 cells.

BW5147 cells were retrovirally transduced with the expression vector for wild-type or mutant E-cadherin together with EGFP. The cells were stained with anti-mouse E-cadherin antibody, ECCD-2, and goat anti-mouse IgG(H+L)-PE.



Supplemental Fig. S3. KLRG1 and $\alpha_E\beta_7$ integrin binding sites on E-cadherin. Mapping of KLRG1 and $\alpha_E\beta_7$ integrin binding sites on the structure of E-cadherin domain 1**.** Orange, light orange and yellow area indicate KLRG1 binding site and magenta area indicaand $\alpha_E\beta_7$ integrin binding site, respectively.

Supplemental Table S1. Binding analysis of KLRG1 to E-cadherins using SPR.

immobilized ligand	analytes	Kd (μM) 25°C $+Ca^{2+}$	$-Ca^{2+}$
KLRG1	EC-D1D2	7	12
	EC-D2D3	N.B	N.B
Other cell-cell recognition molecules*			Ref.
PILRα	CD99	2.2	(1)
LILRB1/2	peptide-MHC	2 - 50	(2) (3) (4) (5)
KIR2DL3	HLA-Cw7/DS11	5.2	(6)
CD8αα	MHC class I	~200	(7)
CD22	CD45	117	(8)
CD80	CTLA-4	0.46	(9)
CD80	CD28	2.4	(9)
FcγRIIa,IIb,III	hFc1	0.72 - 1.9	(10)
TCR	peptide-MHC	1 - 90	(11) (12)

N.B, No Binding.

The ligand is the protein immobilized on the research-grade CM5 chip, and the analyte is injected in solution. *The left and right columns indicate receptors and ligands, respectively.

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